

DETAILED ACTION

Election/Restrictions

1. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 1-18, drawn to a method of treating a component of a deposition apparatus.

Group II, claim(s) 19-37, drawn to a method of forming a target/backing plate construction.

Group III, claim(s) 38-56, drawn to a target/backing plate construction.

2. The inventions listed as Groups I-III do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: The common technical feature unifying Groups I-III is a method of treating a component in a deposition apparatus, the component having a first hardness and exposing a surface of the component by bead-blasting with bead-blast media comprising particles having a second hardness greater than or equal to the first hardness, the particles consisting essentially of one or both metal alloy and elemental metal, this feature is known in the art and has been shown to Applicants in prior art documents such as US Patent No. 5,391,275 (abstract; col. 5, lines 10-21; fig. 1).

3. This application contains claims directed to more than one species of the generic invention. These species are deemed to lack unity of invention because they are not so linked as to form a single general inventive concept under PCT Rule 13.1.

The species are as follows:

Species A1: the particles comprise one or more metallic components compatible with the tantalum (claim 2 appears to read on Species A1)

Species B1: the particles comprise one or more of titanium, molybdenum, tantalum, tungsten, and cobalt (claims 3-4 and 7 appear to read on Species B1)

Species C1: the particles are a first set of essentially tantalum and a second set consist essentially of sodium bicarbonate (claim 5 appears to read on Species C1)

Species A2: the bead-blasting occurs before the forming of the pattern of projections (claim 8 appears to read on Species A2)

Species B2: the bead-blasting occurs after the forming of the pattern of projections and before the bending of the projections (claim 9 appears to read on Species B2)

Species C2: the bead-blasting occurs after the bending of the projections (claim 10 appears to read on Species C2)

Species A3: the second set of particles being soluble in aqueous solution (claim 11 appears to read on Species A3)

Species B3: the second set of particles being soluble in an organic solution

Species A4: the bead-blasting media is less than or equal to about 1:3 (claim 12 appears to read on Species A4)

Species B4: the bead-blasting media is less than or equal to about 1:3 and greater than or equal to about 1:10 (claim 13 appears to read on Species B4)

Species A5: one or more salts selected from the group consisting of alkali halide salts and ammonium halide salts (claim 14 appears to read on Species A5)

Species B5: one or more salts selected from the group consisting of metal hydroxides (claim 15 appears to read on Species B5)

Species C5: one or more salts selected from the group consisting of halide salts comprising elements selected from groups 1A and 2A of the periodic table (claim 16 appears to read on Species C5)

Species A6: the second composition comprises tantalum (claims 25 and 39 appear to read on Species A6)

Species B6: the second composition consists essentially of tantalum (claims 26 and 41 appear to read on Species B6)

Species C6: the second composition consists of tantalum (claims 27 and 43 appear to read on Species C6)

Species D6: the second composition comprises tantalum and the third composition comprises titanium (claims 28 and 45 appear to read on Species D6)

Species E6: the second composition consists essentially of tantalum and the third composition consists essentially of titanium (claims 29 and 46 appear to read on Species E6)

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Species F6: the second composition consists of tantalum and the third composition consists of titanium (claims 30 and 47 appear to read on Species F6)

Species G6: the second composition comprises tantalum and the third composition comprises one or more of aluminum, tantalum, and titanium (claims 31 and 48 appear to read on Species G6)

Species A7: an entirety of the bonding surface is in contact with the insert (claims 32 and 49 appear to read on Species A7)

Species B7: only a portion of the bonding surface is in contact with the insert (claims 33 and 50 appear to read on Species B7)

Species A8: insert is a solid geometric shape (claims 34 and 51 appear to read on Species A8)

Species B8: insert is a hollow geometric shape (claims 35 and 52 appear to read on Species B8)

Species C8: insert is a solid circle (claims 36 and 53 appear to read on Species C8)

Species D8: insert is an annular ring (claims 37 and 55 appears to read on Species D8)

Species E8: insert is a solid circle and inset within the backing plate (claim 54 appears to read on Species E8)

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Species F8: insert is an annular ring and inset within the backing plate (claim 56 appears to read on Species F8)

Applicant is required, in reply to this action, to elect a single species (A1 or B1 or C1 AND A2 or B2 or C2 AND A3 or B3 AND A4 or B4 AND A5 or B5 or C5 AND A6 or B6 or C6 or D6 or E6 or F6 or G6 AND A7 or B7 AND A8 or B8 or C8 or D8 or E8 or F8) to which the claims shall be restricted if no generic claim is finally held to be allowable. The reply must also identify the claims readable on the elected species, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered non-responsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

4. The claims are deemed to correspond to the species listed above in the following manner:

The following claim(s) are generic: claims 1, 19, and 38 appear to be generic.

5. The species listed above do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, the species lack the same or corresponding special technical features for the following reasons: The common technical feature unifying Groups I-III is a method of treating a component in a deposition apparatus, the component having a first hardness and exposing a surface of the component by bead-blasting with bead-blast media comprising a particles having a second hardness greater than or equal to the first hardness, the particles consisting essentially of one or both metal alloy and elemental metal, this feature is known in the

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art and has been shown to Applicants in prior art documents such as US Patent No. 5,391,275 (abstract; col. 5, lines 10-21; fig. 1).

6. Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement may be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention or species may be made with or without traverse. To preserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL BAND whose telephone number is (571)272-9815. The examiner can normally be reached on Mon-Fri, 9am-5pm, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alexa Neckel can be reached on (571)272-1446. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/M. B./

Examiner, Art Unit 1795

/Jennifer K. Michener/

Supervisory Patent Examiner, Art Unit 1795